DMB
IE:IN 82-06

American Electric Power Service Corporation
D. C. Cook 1, 2 (50-315, 50-316)

Cincinnati Gas and Electric Company
Zimmer (50-358)

The Cleveland Electric Illuminating Company
Perry 1, 2 (50-440, 50-441)

Commonwealth Edison Company
Braidwood 1, 2 (50-456, 50-457)
Byron 1, 2 (50-454, 50-455)
Dresden 1, 2, 3 (50-10, 50-237, 50-249)
La Salle 1, 2 (50-373, 50-374)
Quad-Cities 1, 2 (50-254, 50-265)
Zion 1, 2 (50-295, 50-304)

Consumers Power Company
Big Rock Point (50-155)
Palisades (50-255)
Midland 1, 2 (50-329, 50-330)

Dairyland Power Corporation
LACBWR (50-409)

The Detroit Edison Company
Fermi 2 (50-341)

Illinois Power Company
Clinton 1, 2 (50-461, 50-462)

Iowa Electric Light and Power Company
Duane Arnold (50-331)

Northern Indiana Public Service Company
Bailly (50-367)

Northern States Power Company
Monticello (50-263)
Prairie Island 1, 2 (50-282, 50-306)

Public Service of Indiana
Marble Hill 1, 2 (50-546, 50-547)

Toledo Edison Company
Davis-Besse 1 (50-346)

Union Electric Company
Callaway 1, 2 (50-483, 50-486)

Wisconsin Electric Power Company
Point Beach 1, 2 (50-266, 50-301)

Wisconsin Public Service Corporation
Kewaunee (50-305)

Illinois Department of Nuclear Safety
Gary N. Wright, Manager, Nuclear Facility Safety

IE 31
1/1

SSINS No.: 6835
Accession No.
8202040130
IN 82-06

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

March 12, 1982

IE INFORMATION NOTICE NO. 82-06: FAILURE OF STEAM GENERATOR PRIMARY SIDE MANWAY CLOSURE STUDS

Description of Circumstances:

The Nuclear Regulatory Commission (NRC) was notified by Maine Yankee Atomic Power Company and by Combustion Engineering (CE) that during routine disassembly of a steam generator primary side manway at Maine Yankee, 6 of the 20 manway closure studs failed and another 5 were found by ultrasonic testing to be cracked. These are $1\frac{1}{2}$ x 10 inch studs of SA 540 grade B 24 alloy steel. The studs had been exposed to boric acid from a small primary coolant leak and to Furmanite sealing compound (primary grade) applied in an attempt to seal this leak. The studs exhibited evidence of surface corrosion attack possibly as a result of an interaction associated with stud preload, lubricant, Furmanite and primary coolant leakage environment. A metallurgical analysis to determine the failure mechanism is currently underway at CE. The entire set of studs on the affected steam generater (SG #2) have been replaced and an ultrasonic examination of all primary manway studs on steam generator units 2 and 3 s being performed. Further corrective actions are pending stud failure analysis and its applicability to other primary boundary closures.

In the last few years there have been a significant number of incidents of failed or severly degraded bolts and studs. Examples of the latter; primary coolant pump stud-bolts (Calvert Cliffs and Ft Calhoun) and steam generator primary manway closures studs (Oconee and ANO-1). The failures described were attributed to stress corrosion cracking and corrosion wastage of high strength studs that are difficult to detect.

The NRC has contacted the CE Regulatory Response Group and requested a review of the problem.

This IE information notice is provided as an early notification of a potentially significant matter that is still under review by the NRC staff. If NRC evaluation so indicates, further licensee action may be requested. In the interim, we expect that licensees will review this information for applicability to their facilities.

No written response to this information notice is requested. If you need additional information, please contact the Regional Administrator of the appropriate NRC Regional Office.

Attachment:
Recently issued IE Information Notices

Attachment
IN 82-06
March 12, 1982

RECENTLY ISSUED
IE INFORMATION NOTICES

Information Notice No.	Subject	Date of Issue	Issued to
82-05	Increasing Frequency of Drug-Related Incidents	03/10/82	All power reactor facilities holding an OL or CP
82-04	Potential Deficiency of Certain AGASTAT E-7000 Series Time-Delay Relays	03/10/82	All power reactor facilities holding an OL or CP
82-03	Environmental Tests of Electrical Terminal Blocks	03/04/82	All power reactor facilities holding an OL or CP
82-01 Rev. 1	Auxiliary Feedwater Pump Lockout Resulting from Westinghouse W-2 Switch Circuitry Modification	02/26/82	All power reactor facilities holding an OL or CP
80-32 Rev. 1	Clarification of Certain Requirements for Exlusive-Use Shipements of Radio-active Materials	02/26/82	All facility, materials and Part 50 licensees
82-02	Westinghouse NBFD Relay Failures in Reactor Protection Systems at Certain Nuclear Power Plants	01/27/82	All power reactor facilities holding an OL or CP
82-01	Auxiliary Feedwater Pump Lockout Resulting from Westinghouse W-2 Switch Circuit Modification	01/22/82	All power reactor facilities holding an OL or CP
81-39	EPA Crosscheck Program - Low Level Radioiodine in Water Test Program	12/23/81	All power reactor facilities holding an OL or CP
81-38	Potentially Significant Equipment Failures Resulting from Contamination of Air-Operated Systems	12/16/81	All power reactor facilities holding an OL or CP

OL = Operating License
CP = Construction Permit